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Anti- Tumor endothelial marker 8 (TEM8), rabbit Polyclonal Antibody

Catalog No. GB-10010 **Quantity:** 100μg **Applications tested:** ELISA
Antigen species: Human **Reactivity:** Human
Host species: Rabbit **Form:** Peptide affinity purified antibody

Target description

The protein encoded by this gene is a type I transmembrane protein and is a tumor-specific endothelial marker that has been implicated in colorectal cancer. This protein has also been shown to be a docking protein or receptor for Bacillus anthracis toxin, the causative agent of the disease, anthrax. The binding of the protective antigen (PA) component, of the tripartite anthrax toxin, to this receptor protein mediates delivery of toxin components to the cytosol of cells. Once inside the cell, the other two components of anthrax toxin, edema factor (EF) and lethal factor (LF) disrupt normal cellular processes. Three alternatively spliced variants have been described. Transcript Variant: This variant (1) encodes the largest isoform which has a unique 200 aa carboxy terminus.

Antigen

This polyclonal antibody was raised by immunizing rabbit with a synthetic peptide located within the putative extracellular domain of human TEM8.

Application

The antibody titer is more than 40K for ELISA. It has not been tested in the other applications. However, for the first testing, we recommend 1/5,000 dilution for ELISA, 1/1000 dilution for Western blot analysis (WB) of recombinant protein, 1/400 dilution for tissue extracts or cell lysates, 1/100 dilution for immuno-histochemistry (IHC) staining on frozen cryosections, 1/50 dilution for IHC staining on paraffin embedded sections.

Related Products

1. Anti-TEM1 pAb (GB-10374).
2. Anti-TEM2 pAb (GB-30131)
3. Anti-TEM3 pAb (GB-30132).
4. Anti-TEM4 pAb (GB-30133)
5. Anti-TEM5 pAb (GB-10011).
6. Anti-TEM5 pAb (GB-30028).
7. Anti-TEM5 pAb (GB-30088)
8. Anti-TEM8 pAb (GB-10344).
9. Anti-TEM8 pAb (GB-10009).
10. Anti-TEM8 pAb (GB-30021).
11. Anti-TEM8 pAb (GB-30133).

Ab dilution	Pre-bleed	Purified-Ab
1:0.1K	0.337	1.361
1:1K	0.152	0.926
1:10K	0.101	0.254
1:100K	0.092	0.111
1:1,000K	0.092	0.096
Titer		~40K

ELISA Protocol

Antigen is coated on EIA strips at 1μg per well. Add 200μl of blocking buffer and then wash wells with PBST buffer. Antiserum or peptide specific purified antibody GB-10010 is diluted in series as 10^2~10^6 folds and added in separate wells. Incubate antibody for 1hr. Wash unbound antibodies and add anti-rabbit IgG-HRP conjugate. Wash the plates and add substrate to develop color for 5 min. Read absorbance (ABS) at 650 nm. Amount of color is directly proportional to the amount of antibodies. Antibody titer is defined as >0.1 of ABS of antiserum minus pre-bleed serum.

Storage

It is supplied as peptide affinity purified antibody in lyophilized powder. Redissolve the powder with 100 microliter sterile water will restore to the original concentration 1mg/ml (1×PBS). Store at 4°C for short-term application. For long-term storage, aliquot and store at -20°C.

References

1. Akash Nanda, Eleanor B. Carson-Walter, Steven Seaman, Thomas D. Barber, Jason Stampfl, Sujay Singh, Bert Vogelstein, Kenneth W. Kinzler, and Brad St. Croix. TEM8 Interacts with the Cleaved C5 Domain of Collagen α3(VI). Cancer Research 64, 817-820 (2004).
2. Darran J. Wigelsworth, Bryan A. Krantz, Kenneth A. Christensen, D. Borden Lacy, Stephen J. Juris, and R. John Collier. Binding Stoichiometry and Kinetics of the Interaction of a Human Anthrax Toxin Receptor, CMG2, with Protective Antigen. The Journal of Biological Chemistry. 279 (22), 23349–23356 (2004).
3. Gaynor Davies, Giles H. Cunnick, Robert E. Mansel, Malcolm D. Mason & Wen G. Jiang. Levels of expression of endothelial markers specific to tumour-associated endothelial cells and their correlation with prognosis in patients with breast cancer. Clinical & Experimental Metastasis 21, 31–37 (2004).